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VOLUME XIX PITTSBURGH, PA., JANUARY 1946, NUMBER 7



GIANTS IN MINIATURE

A new display at Carnegie Museum showing relative sizes of some of the world's largest animals in comparison with man.

CARNEGIE MAGAZINE

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VOLUME XIX

NUMBER 7

JANUARY 1946

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GIANTS IN MINIATURE

The new display at the Carnegie Museum, portraying representative animal giants of all types and periods, fulfills one of the aims of a museum of natural history—that is, to illustrate the facts of nature in a comparative prospective. The spectator may see at a glance the relative size of the largest animals of the present and the past.

The dinosaurs of the Jurassic and Cretaceous periods, so well represented in actual skeletons in Carnegie Museum, comprise the largest animals that ever roamed the earth, much exceeding in bulk the present-day elephant. A colossus in its own respective tribe, the Moa is the largest extinct bird, definitely dwarfing the ostrich of our times.

But it was not only in those days that there were "giants in the earth." The present-day whale is the bulkiest of all animals that ever inhabited our globe. It takes its place on the display in relief along with the tallest contemporary mammal—the giraffe, the longest known serpent, and the heaviest living turtle.

It was necessary to resort to bygone ages, to the Carboniferous era, to show the giant of the insect world—a dragonfly almost three feet in the span of wings.

All these forms and several others are shown in scale, one-twentieth of the natural size, along with the average human stature for comparison.

The exhibit, seven by eight feet in size, has been executed in plaster relief by Harold Clement of the Carnegie Museum staff. The uncolored figures represent extinct forms known today only from fossils. The tinted figures are of animals now living. A key diagram accompanies the case.

—ANDREY AVINOFF

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The Carnegie Institute, in the broadest sense, holds its possessions in trust for mankind and for the constant welfare and happiness of the race. Anyone, therefore, who by a gift of beautiful works of art, or objects of scientific value, or a donation to its financial resources, aids in the growth of these collections and the extension of its service, is contributing substantially to the glorious mission of the Institute.

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J. Kenneth Douth

Curator of Mammalogy

JANUARY 13—"Wonders of the Great Barrier Reef"

T. C. Roughley

Australian News and Information Bureau

JANUARY 20—"The Land of the Moquis"

J. LeRoy Kay

Curator of Vertebrate Paleontology

JANUARY 27—Subject to be announced.

Arthur C. Twomey

Curator of Ornithology

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New models of six dinosaurs
prepared by Charles W. Gilmore
Hall of Fossil Mammals

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JANUARY 6—FEBRUARY 20

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THE LAND OF THE MOQUIS

By J. LeROY KAY

Curator of Vertebrate Paleontology, Carnegie Museum



WHILE acting as guide for a party surveying for dam sites along the Colorado River in Utah in 1919, I first heard of some cliff dwellings in San Juan County, Utah. A few years ago, while a group from Carnegie

it very much, knowing it would be the last of civilized comfort until the trip was over.

The next morning, as we bought provisions at the local store and loaded our truck and trailer, we were the object of considerable attention from a number of Navaho and Ute Indians who either had camps at the edge of the town or had come in for the day. The squaws wore bright-colored shawls and plaid or striped skirts and beaded belts. The bucks wore beaded bands on their high-crowned, broad-brimmed hats, but otherwise the conventional clothes of the district.

We started west about midday by a winding dirt road over the Abajo Mountain and through a part of the La Sal National Forest. At first we drove through a broken landscape of mesas, draws, and outcrops of light and red sandstones, covered for the most part by scrub oak, juniper, pinon, and sage brush, with a few scattered cotton-

Institute was investigating Triassic red beds for fossils in that section, the publisher of the *Neus Independent* at Moab, Utah, showed us a small firepot that had been found in the dwellings. After careful inquiry it was learned that the area had not been investigated by any organized group and little was known about the district. Accordingly, a party from the Carnegie Institute, sponsored by C. E. Cowan of Greensburg, Pennsylvania, was delegated to make an archeological reconnaissance of the area this past summer.

The party consisted of David H. Rial, principal of several secondary schools in Pittsburgh; Herbert L. Spencer, president of Bucknell College, and his daughter Nancy; Roy M. Austin, superintendent of schools in Whitehall, Montana; and R. L. Fricke and myself, of the Carnegie Museum staff. We met at Grand Junction, Colorado, the first of August and motored to Monticello, the San Juan County seat, to secure the proper permits for collecting archeological material from the county commissioners. The party continued to Blanding, Utah, where Henry Lyman joined us as official guide. He had made arrangements with the mayor for a well-furnished modern apartment for our use that night. We all enjoyed

In making this investigation of cliff dwellings along the Colorado River in Utah last summer, Dr. Kay departed from his special field. For the past six years he has been studying geology and vertebrate paleontology in Montana and the Northwest, for the purpose of establishing ancestral types of the fossil vertebrate life of the Great Plains. However, archeology has been his and Mrs. Kay's joint hobby for some time. The great question mark overshadowing the dwelling place of earliest man rises over the "Moqui houses," according to Dr. Kay.

Dr. Kay began working for Carnegie Museum at the Dinosaur National Monument in Utah, his native state, in 1915 under the late Earl Douglass. He came to the Museum as field man in 1923, was Acting Curator of Vertebrate Paleontology from 1934 to 1941, and was appointed Curator in 1941. He has worked in the field each summer except in 1924 and has made eleven winter trips.

woods in the draws. In a number of places, back a short distance from the road, were Indian camps of hogans or tents with many papooses playing around. Each camp seemed to have a few ponies and sheep or goats. As we reached the brow of the mountain, the plants changed to thickets of various kinds of bushes, scattered large ponderosa pines, and groves of aspen. Among the trees cattle were grazing.

Soon after reaching the top of Abajo Mountain we turned off the road and proceeded to the Twin Springs Camp of the Scorup Cattle Company. Here a bowl or basin is fenced in as a pasture for cattle and horses and within this enclosure lush grass and many kinds of flowering plants, such as sego lilies, Indian paintbrush, asters, were in full bloom—indication of the unusually plentiful rainfall of the summer. Near a clear cold spring the company has substantial cabins where the foreman, Harvey Williams, and his cowboys soon made us feel at home. Henry, our guide, was on leave from the Scorup Company, and Jack Steele, a young cowboy, here joined our party as his assistant.

We planned to stay at Twin Springs while the guide rode about twenty miles to the north and gathered horses and pack mules from another camp for our use. He left soon after supper and the rest of the party made preparations for the night. As it looked like rain, Dr. Spencer and Nancy slept in one of the cabins. The others spread our eighteen-by-thirty-foot shelter canvas on a gently sloping grassy spot, arranged bedrolls in a row along the upper edge of the canvas, and folded the canvas up over the beds. It was well we did this, for soon the rain came pelting down and by morning there were pools of water on the top canvas.

The next forenoon was spent collect-



HERBERT L. SPENCER

Our saddle horses and pack train on a sandstone ledge. In the foreground, a boulder weathered from the cliff.

ing plant specimens and taking pictures. The guide returned about mid-afternoon with the horses and we packed up and motored to a spot known as Hideout, which was to be our headquarters camp. Henry, Jack, Nancy, and Fricke took a short-cut trail with the horses and mules.

A few miles before reaching Hideout, the road led to the north around a large prominence, called the Woodenshoe Butte, and over a ridge. It was from the top of this ridge that we got the first good view of the country we were to investigate. Here, looking west toward the Colorado River, as far as the eye could see, were broad flat mesas covered with juniper, cedar, and sage brush. Rising from the mesas were many prominent red buttes several hundred feet high, such as the Woodenshoe. Down five or six hundred feet of steep boulder-strewn slopes from the rim of the mesas were broad valleys, floored with light-colored sandstone. Into this sandstone the water had cut narrow box canyons with precipitous sides, one- to two-hundred feet deep. From the broad valleys are many steep side canyons leading up to the rim and sometimes partly dissecting the mesas.

One such canyon is the Hideout. At its head the Scorup Cattle Company has built a fence around a good-sized

tract of land for a pasture, constructed a one-room cabin, and piped the water from a small spring into some watering troughs. To pitch a tent, we tied the shelter canvas between some cottonwood trees, thrusting the center up by means of a pole to form an open-sided tent. The grub box and supplies were placed around this pole and our bedrolls around the supplies.

The road ended at Hideout and accordingly the next day we saddled the horses and rode several miles to the south. Here we began the investigation of some stone houses which later proved to be probably the oldest and most interesting of all the sites visited.

These houses, being out in the open, were in a tumble-down state, but several feet of the lower part of the walls were more or less intact. The two where we worked were of three rooms each. The walls were built of rocks, laid up without mortar. The outside entrance was evidently high up on

the wall, as there was no evidence of any opening in the walls that remained standing. Inside the main or center room of the house where we did the most work were several stone steps. The openings between the rooms were near the bottom of the wall.

We screened the debris that we had removed to expose the walls, but very little material was retrieved other than a few shards of pottery, corncobs, and pieces of charcoal undoubtedly from the charred end of the roof timbers. We searched the ground around the old buildings and found a number of Yuma points, the only ones of this type we discovered in the district.

After spending two days at the houses we decided to explore some of the lower box canyons. We packed the mules with our bedrolls, equipment, and a few days' provisions, and started down Hideout Canyon. In places a dim wild-cattle trail showed, but for the most part we had to go where the going seemed the best. We trimmed cedar and juniper trees as we went, and cut paths through the scrub oak thickets. In other places we followed the rim rock of box canyons where the only trace left of our passing was metallic marks on the bare rocks made by the horse- and mule-shoes. For a good part of the way it was necessary to walk and lead the horses over ledges and slide rock.

After several hours of slow tedious travel we climbed out of Hideout Canyon and crossed a small mesa to the north, descending a dim trail into a side canyon. At the bottom of this canyon was a water seep where Henry informed us he had camped while chasing wild cattle. Since the day was well spent and the men and horses tired, we began preparing camp for the night.

After the horses were unsaddled, Jack took them to a near-by side hill where some scattered grass and browse grew, and turned them loose. Some of the party began filling the water bags from the puddles below the seeps, some began carrying wood for a campfire, while others leveled places under the



HERBERT L. SPENCER

Henry Lyman gets rain water from the 500-gallon natural tank that supplied our party at this site.



HERBERT L. SPENCER

Dr. Kay beside a Moqui house in an overhanging cliff. A deep canyon stretches in the background distance.

overhanging ledges and spread down the bedrolls. Soon the coffee was boiling, the bacon frying in the pans, and Henry's sourdough biscuits were browning in the dutch ovens. I am sure that when he called, "Come and get it," everyone forgot about sore and tired muscles in the rush to fill plates and cups.

After supper and dishwashing we all crawled into our bedrolls. It rained during the night and got quite cool toward morning. The nights were all cool and, because of the frequent rains, the days were less hot than usual in that section.

After breakfast the horses were saddled, and water bags filled and one mule packed with equipment that included screen, shovels, picks, wrapping paper, burlap bags, whisk brooms, twine, cameras. We began climbing up the northern side of the canyon and discovered several cliff dwellings near the rim. The San Juan County people call these "Moqui houses" because they resemble somewhat the Moqui—that is, Hopi—dwellings of today. Because they were close to camp and could be investigated later, we continued on to the top and crossed a mesa to another deep box canyon in which Mr. Williams, the Scorup Company foreman, had earlier told us he had seen some cliff dwellings while riding along the rim of the can-

yon. We spent the greater part of the day climbing up and down the cliffs, looking over the canyon walls with binoculars, but were unable to locate any dwellings.

In the afternoon, going back across the mesa, we examined many camp sites where the Moquis had been burning pottery. Their method apparently was to mold the pot from red Triassic mud, the material closest at hand, to construct a fireplace by placing flat stones on edge, then to place the

pot within and fire it with juniper and cedar wood. At most of these sites the ground was nearly covered with pieces of pottery. A number of artifacts were found, a stone tomahawk, a stone knife, and a number of arrow points.

When we returned to the cliff dwellings we had discovered in the morning, it was decided that part of the men would stop and investigate them, and the others continue to camp and attend to the horses and start supper.

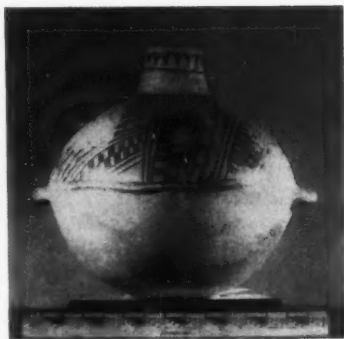
The houses were photographed and construction examined. They had been built by placing timbers about two feet apart, upright from the floor of the cave to the roof, then filling in between the timbers with rock and mortar. Although the one opening or door was about the same size as others we saw later, the construction was somewhat different. The door lintel was made by placing several small pieces of cedar side by side and lacing them together with fiber. These houses and others a short distance west of camp were the only ones observed with this type of construction. In others a flat stone was used as the cap rock for the door. Although we screened quite a bit of material from the houses, nothing of great importance was discovered.

Seven or eight miles to the west, on another day, we visited a large cave which showed evidence of having been

inhabited by at least two distinct cultures, that is, the pottery-making Moquis, and the later Indians who were probably forerunners of the Navahos. The floor of the cave contained about fifty tons of debris. We screened down to the bottom of this material in several places and near the bottom found pieces of pottery similar in design and pattern to that of the Moquis. In one end of the cave a house had been constructed by the use of juniper stulls set fairly close together—evidence of the work of a later type of Indian. The space between the stulls was chinked by wrapped bundles of juniper bark about the size of brick. A foot below the surface of the debris on the floor were flat rocks and juniper bark mats and underneath one of these mats was a well-preserved sandal made from Yucca fiber.

In the lower part of Hideout Canyon is located an almost inaccessible site. A shelf runs along, halfway up the side of the box canyon. This shelf is about forty feet wide at the center and narrows to nothing at either end. At one end, where the cliff is slightly inclined, are some pits or notches worked into the rock by which one can, if not afraid of high places, gain access to the shelf. On the shelf are a number of partly tumble-down houses, at the base of a slightly overhanging cliff.

Near the center of the shelf and six



R. L. FRICKE

Pottery jug left by the Moquis.

feet above it was a small cave, from the roof of which water was slowly dripping from a number of places. The actual time between drops was from four to thirty seconds. By catching the water from these drips as a drinking supply, three of our party were able to stay and work at this site for the greater part of two days and one night.

There were three houses or storage bins, built partly with stones laid up without mortar, and finished with unnotched cross-logs lying parallel with the stone walls and chinked with rocks. The screening of these houses brought to light mostly shards of pottery of the same design as those scattered over the shelf.

We did considerable screening and excavating along the walls of one stone house, situated between a tree that was growing in a crack in the rock and the base of the cliff. We found the greater part of a large jug, highly decorated with paint on the outside, lying against the wall at one side of the door or opening. A root from the tree had grown along the opposite side of the jug, attaining a diameter of about five inches in the past fifty years, and in the process had crushed



HERBERT L. SPENCER

David H. Rial examining the double Moqui house.

the jug. Another open-top pot or jar with painted design on the inside was found a few feet away.

As the water was insufficient for a long stay at this place and our supplies were getting low, it was decided that most of the party should return to Hideout while Henry and the writer rode several miles to the south to another canyon to investigate the possibility of obtaining water in that area. We found several natural rock tanks containing sufficient water for several days only a few rods from a number of well-preserved dwellings.

We knew we could not reach camp before dark, but as we were leaving we noticed the bottom of a jug protruding from the top of a dump. We stopped to carefully dig it out and found to our surprise and elation that it was a complete and perfect jug. (*See cut.*) Wrapping it in a coat and a saddle blanket, and tying it with a lead rope from one of the horses, we started back to camp. The slope to the mesa appeared to be a short cut, so leading our horses and taking turns carrying the jug under our arms we began the toilsome climb up the rock-strewn slope. Several times we had to retrace our tracks and detour around the rocks. On reaching the rim, a ten- to fifteen-foot ledge blocked our way. Working along the ledge we found a large crevasse where, by throwing in rock and brush, we were able to get the horses to the top and finally reached camp as the others were preparing for bed.

The next morning, supplied with food and equipment, we returned to the site by way of the mesa and a slightly more accessible route down the slope. On reaching the rim of the box canyon opposite the dwellings, we tied a number of ropes together and lowered our provisions and equipment over the ledge. The human beings went down by a more circuitous route.

There were a number of well-preserved dwellings at this site, one of which was double but with no connecting door. The construction was dif-

ferent from any we had seen. These houses were built entirely of stone and mortar. One was decorated around the opening by the insertion of colored stones into the mortar. It was the only one that we observed with stone steps on the outside leading up to the opening. At the edge of the cave were the foundations of two larger structures.

Paralleling these was a dump where the inhabitants had thrown or dumped their waste for a long period of time. The dump was about six feet high, twelve feet wide, and thirty feet long. It was too wet to screen, but by working one spot with awl and whisk broom we found it to be mostly ash containing shards of pottery, corncocks, and the like.

Near the back wall inside and outside the chambers, screening brought to light such articles as corn, beans, pumpkin seeds and rind, flints, a variety of string and rope made mostly from Yucca fiber, bone awls, sandals, fire sticks, and knotted strips of fibrous plants, probably used in tying timbers together for various purposes.

It would take a fair-sized crew two or three weeks to investigate thoroughly this one site. There are undoubtedly many more in the district and each would add to our knowledge of these early inhabitants of America.

A side trip was made to Indian Creek to study and photograph the largest collection of pictographs the writer has ever seen in one place. The pictographs were superimposed on each other, indicating that many tribes had lived there at different times.

On the return trip from Moqui land we had a good chance to observe one form of erosion that has made the topography of that country what it is today. At Cottonwood Creek we were held up for more than four hours by a flood from a cloudburst further north. The water was thick with sediment and floating timber, and large boulders weighing several hundred pounds were rolled down the creek.

THAT'S WHY THE COLLECTION WAS BORN

By GRACE PAGANO

Director of Fine Arts, *Encyclopaedia Britannica*



It would be rather difficult for me to write an uncolored, matter-of-fact sequence of the events which led to the formation of the *Encyclopaedia Britannica* Collection of Contemporary American Painting.

From the beginning the *Britannica* Collection has had as talisman a very fine kind of spontaneity. All of us who shared in its development were aware of it—a feeling that this was a fine thing to do and a right thing for *Britannica* to sponsor. That spontaneity has never faltered, and now after three years when we see it more or less a fait accompli, we are grateful that we had the good fortune to be part of it.

It began in 1942. Walter Yust, the editor of *Encyclopaedia Britannica*, and E. H. Powell, the president, were discussing a new printing for *Britannica Junior*, the boys' and girls' encyclopedia. Years ago Mr. Powell had studied art at The Art Institute of Chicago and the Chicago Academy of Fine Arts. Both he and Mr. Yust are ardent gallery-goers and are week-end painters in good amateur standing. They decided that rather than the usual line drawings and photographs, *Junior* would be a more interesting edition if contemporary American paintings were used as visual explanation for certain subjects.

Just as simply as that it began! Thomas Hart Benton painted *Boom Town* to illustrate an article on petroleum—a powerful picture that portrays all the excitement of a get-rich-quick

town mushrooming greedily around the precious oil wells. Alexandre Hogue's painting proved to be a very eloquent description for the subject of wind erosion. Robert Philipp's sensuous handling of pigment caught the very spirit of the theatre in his painting *Harriet*. Doris Lee painted the nostalgic *Arbor Day*. When these commissioned paintings arrived in Chicago, perhaps twelve or fifteen of them, we were all very enthusiastic. We felt that they would be far more evocative of the subject to the young readers of *Junior*, who would at the same time receive an effortless course in art appreciation.

Meanwhile our own employees began to show interest. The paintings had been hung on the walls of our Chicago office. We noticed them in little groups discussing their favorite pictures, bringing in their friends and families after hours. We were delighted—and the plan for our collection was the inevitable result! We felt that if among our own people there was this gratifying reaction, why wouldn't it be indicative of the response of other people all over America? We also felt that *Encyclopaedia Britannica* would be a fitting sponsor. William Benton, at that time chairman of the Board of *Britannica*, now Assistant Secretary of State, and other members of our Board were enthusiastic about this project. Without further ado, Mr. Powell, Mr. Yust, Glenn Price, who was then art director, and I embarked on the fascinating business of acquiring paintings. We decided to start with "The Eight" and from there on to aim for as broad a cross section of twentieth century American painting as we could attain in a hundred or more pictures. We believed that American art had come of age. It was no longer subsidiary to the



CABBY BY GEORGE LUKS

art of Europe. Indeed the artists of Europe, finding life incompatible in Fascist- and Nazi-dominated countries, were already migrating to America to add their talents to the stream of American painting. We had noticed that many of our greatest painters no longer went to Europe to study; and, therefore, a collection composed entirely of American painting in the twentieth century might spread that knowledge to the world. In scope we wanted to show every kind of painting,

from the academic to the abstract—impressionism, expressionism, surrealism—every school at its best. We decided not to be influenced by personal taste, for there must be room in a collection like ours for every kind of painting. All of us are very much aware of *Britannica's* 177-year-old reputation for integrity in every field of endeavor and, with the heritage temporarily in our hands, we determined to do the job right. The judgment of our own group would not be adequate. We established an advisory board. We sent out questionnaires to museum directors, gallery representatives, artists, and art critics throughout the United States, asking them to list the names of artists they considered most important. There was space for the artists' names and columns to designate whether or not the artist was important, good, or fair, and an additional space for remarks. When the questionnaires were returned, the answers were transferred to a master sheet and we had an all-inclusive cross section of opinion.

Despite all the advice and our very earnest endeavors, the job was fascinating but not an easy one. I don't think that Mr. Powell or Mr. Yust, or any of the others who worked with us, would resent my saying that in spite of all precautions we occasionally fell short of the measure. Sometimes we looked at too many paintings on the same day



FAMILY UNIT BY ALEXANDER BROOK



MOONLIGHT BY JON CORBINO

and sometimes we made an unfortunate selection. It's a dangerous business—this making a snap decision on a superficial acquaintance. We learned that the vision is apt to distort if one changes the focus too speedily. For example, it isn't fair to turn from the lyrical and emotional picture to the intellectual abstract, or vice versa, without taking time out to adjust to a new set of values. Luckily it never discouraged us and we learned to go more slowly and more thoroughly as time went on. The artist himself was most co-operative and when he realized that the choice we had first made added no new note was happy to help us make a new and better selection.

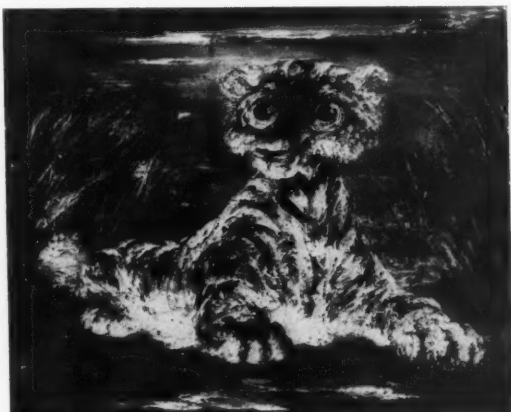
After more than two years of seeking we had acquired 116 paintings and felt that we were ready to launch them, so in April 1945 we had our initial show at The Art Institute of Chicago.

We printed a very handsome catalogue in which each artist is represented by a reproduction of his painting, a brief biography, and

a personal statement pertinent to his painting. It was my job to write the biographies and it was a fascinating assignment. They are a fine, intelligent, forthright group of men and women, these artists of ours, and it is a great privilege to know them. Duell, Sloan and Pearce put the catalogue in book form, which meant that these paintings, or at least repro-

ductions of them, reached another large audience.

Up to the present time the collection has been shown at Rockefeller Center in New York, Museum of Fine Arts in Boston, Corcoran Gallery in Washington, Dayton Art Institute, and now at the Carnegie Institute, with 130 canvases. The collection has been seen by approximately two hundred thousand people. Reproductions have appeared in countless magazines and newspapers. Writers and critics have given us fine



CUB AND INSECT BY DARREL AUSTIN



THRESHING IN MINNESOTA BY ADOLF DEHN

encouragement. We feel that in some measure we have helped the cause of art and artists and *Britannica* has benefited by the prestige that this project has given us.

We have been asked many times why *Britannica* was interested in making this collection and sending it around the country. It seemed to us that it was a very natural thing for us to do. *Britannica* has always been interested in education and broad cultural movements, and showing American painting to American people fits into this picture very well. We are even trying out a further experimental step through the medium of Encyclopaedia Britannica Films, Inc. We are packaging a complete set of kodachrome slides of the *Britannica* collection plus a series of slide talks and lectures that we hope may be of value to art teachers and students throughout the United States. Although at the time of this writing the set is not yet ready for marketing, we have had many enthusiastic inquiries about it. Through this project another large audience in more remote areas will have a chance to study

these pictures, reproduced in full color.

Despite all the many controversial opinions, *Britannica* believes that the tastes of the critic and the initiate in art may be too "high school" for the American public and a sympathetic explanation might do much to bridge the gap. Therefore we have tried to make the approach as human as possible in our interpretation of these paintings. In the introductory letter that Mr. Powell wrote in the catalogue he stated: "*Britannica* hopes that America will really look at her own art—but the decision, in all good faith, rests not with *Britannica* but with America. . . . Exposure to art without any coercive insistence seems to be a democratic basis for meeting any new experience that Americans understand and approve." The love of beauty is not limited to any one class and American people are always ready to meet a new adventure.

At the time this article is being written, we have added to the collection twenty-one new paintings and have made eight substitutions. The substitutions were made with the ap-

A NEW TRUSTEE

proval and in some cases at the request of the artist. Rockwell Kent felt that the commissioned painting we had did not represent him at his best at easel painting. Mr. Kent submitted to us *The Burial* and we agreed that he was entirely right. In Boston when we talked with Georges Schreiber he stated that he felt that his painting *Night Haul, Maine* was not representative of the way he was painting today, so we have since acquired his *Brass and Strings*. More or less the same thing happened in the case of Fletcher Martin, Clarence Hinkle, Dale Nichols, Anton Refregier, Morris Kantor, and Jon Corbino. When we looked at the collection after these revisions were made, we felt that our show was taking on a much finer quality. There are still important names missing from our collection. Sometimes a certain painting has not been available, so we wait for one that will be compatible with our collection. Some of our younger artists have had their careers interrupted because of the war and we look forward eagerly to what they will have to say when they start painting again.

As things stand now, we plan a five-year tour of the United States, after which we may take the paintings to Canada, Mexico, and South America. The ultimate fate of the collection is still unknown to us. Perhaps some of the paintings will find a home in our various offices throughout the world; perhaps through the auspices of the University of Chicago, the owner of *Britannica*, they may one day be housed as a permanent collection. Meanwhile they will have had a lasting opportunity to make their own eloquent appeal for the recognition they so richly deserve. We said at the beginning that this was to be a live and growing collection. We meant it then. Nothing could change us now. We're sold on *Contemporary American Painting*!

The collection will continue at the Carnegie Institute through January 27. It will next be shown at the Syracuse Museum of Fine Arts.



DAVID L. LAWRENCE, who takes office as Mayor of Pittsburgh on January 7, becomes ex officio a member of the Board of Trustees of Carnegie Library of Pittsburgh, which carries with it membership on

the Boards of Trustees of Carnegie Institute and Carnegie Institute of Technology.

Mr. Lawrence is president of Harris-Lawrence Insurance Company, Inc. He served as chairman of the State Democratic Committee from 1942 until December 19, 1945, and also from 1934 to 1940. He has been a member of the Democratic National Committee since 1940 and will continue this work. Mr. Lawrence served as Secretary of the Commonwealth from 1935 to 1938 and was district collector of internal revenue in 1933. In 1931 he was a candidate for County Commissioner.

The new Mayor was born in downtown Pittsburgh, was graduated from St. Mary's High School, and for some years was a stenographer in the law office of Democratic leader William J. Brennan. For the ten years from 1914 he was a registration commissioner, except for a period as Lieutenant in World War I in the Judge Advocate's department.

Cornelius D. Scully, who retires this month after a nine-year period as Mayor and also as a trustee of the Carnegie Institute, has maintained active interest in the work of the Board of Trustees. He has been serving on the Fine Arts Committee and on the Building and Grounds Committee.

A graduate of the University of Pennsylvania and of the University of Pittsburgh Law School, he succeeded William N. McNair as Mayor in 1936.

TWO PAINTINGS REMAIN

Two canvases from "Painting in the United States, 1945" have been added to the permanent collection of the Department of Fine Arts—*Mother and Daughter* by Yasuo Kuniyoshi, of New York, and *Israel* by Samuel Rosenberg, of Pittsburgh. The latter painting was awarded First Honorable Mention in the exhibition. They were acquired through the generosity of the twenty-four subscribers to the Patrons Art Fund, and bring to a total of fifty-three the number of pictures purchased through that Fund since its establishment in 1922.

Mother and Daughter by Yasuo Kuniyoshi is oil on canvas, forty and one quarter inches high by thirty and one quarter inches wide. It is signed "Kuniyoshi" in the upper right-hand corner, but is not dated. It was painted, however, early in 1945 and then was exhibited for the first time in April in the artist's one-man exhibition at The



MOTHER AND DAUGHTER
BY YASUO KUNIYOSHI

Downtown Gallery in New York City.

The picture shows the half-length figures of a woman and a young girl, placed low on the canvas, and framed at the bottom with a green woodwork and at the right by a peach-colored drapery, against a shaded brown background. The figures are shown in an embrace, intense and poignant, and the contrast between them is sharply dramatic. The face of only the mother, the right-hand figure, is visible, caught at a moment of emotion as she presses her daughter toward her with both hands, tense, eyes shut, and the whole world forgotten in the depth of her feeling. The girl, on the other hand, is relaxed, with her fingers resting lightly on the woodwork. Apparently she acquiesces in the mood of the moment, without understanding it. That mood is one of relieved thanksgiving rather than joy for something averted or escaped rather than for something in the future.

The colors are the exquisitely delicate shades characteristic of this artist's palette—the brown in the girl's dress, the grey in the woman's scarf, her white blouse, dark red jacket. He has painted numerous other figure subjects, but he also paints still lifes and landscapes. Throughout, his chief concern is with esthetic problems. His style—showing the influences of his native oriental strain, American upbringing and environment, and contact with the French—developed early in his career and has gradually built up to a complete mastery of technique and expression. His work is always sensitive, subtle, animated, and delicately colorful, yet he is not afraid to make use of the amusing, exaggerated, or grotesque when it suits his theme. His is an inimitable art, but eminently attuned to the themes selected and the treatments desired.

Yasuo Kuniyoshi has been exhibiting in the Founder's Day Exhibitions at the

Carnegie Institute since 1930, and his paintings have been honored by the jury on three occasions. In the 1931 International he was awarded an Honorable Mention, in 1939 Second Prize, and in "Painting in the United States, 1944" he received First Prize for *Room 110*, now in the possession of the University of Nebraska Art Galleries. He was born at Okayama, Japan, in 1893, but came to the United States at the age of thirteen and has made his home here since that time, in recent years in New York City and Woodstock. He studied at the Los Angeles School of Art from 1908 to 1910. Then he went to New York, where he attended the school of The National Academy of Design and the Independent School of Art. In 1916 he entered The Art Students League and became a pupil of Kenneth Hayes Miller. Formal study was supplemented by trips to Europe to study old masters, to his native land, and to Mexico in 1935 on a Guggenheim Fellowship. He teaches at the present time at The Art Students League and at the New School for Social Research. As his contribution to the Allied effort during the war he painted posters for the Office of War Information, wrote broadcasts for the Co-ordinator of Information, and presented to China Relief the proceeds from a twenty-year retrospective exhibition of his work.

Mr. Kuniyoshi has received numerous honors for his painting, and is represented in the collections of important museums all over the country. In 1934 he was the recipient of two awards, the Temple Gold Medal at The Pennsylvania Academy of the Fine Arts and Second Prize at the Los Angeles County Museum. In the American section of the Golden Gate Exposition at San Francisco in 1939 he took First Prize. Last year he received—in addition to the First Prize at the Carnegie Institute exhibition—his second award at The Pennsylvania Academy of the Fine Arts, the J. Henry Scheidt Memorial Prize, as well as a purchase prize at the Virginia Museum of Fine Arts in Richmond. Just recently



ISRAEL BY SAMUEL ROSENBERG

in the American show at The Art Institute of Chicago he was awarded the Harris Bronze Medal.

Israel by Samuel Rosenberg is oil on masonite, thirty inches high by twenty-five inches wide. It is signed "Samuel Rosenberg" at the lower right; it is not dated, but it was painted the summer before it received the First Honorable Mention in "Painting in the United States, 1945," and had not been exhibited before that show.

Israel is a semiabstract, made up of patterns of color, light, and shade. It is based on a realistic if imaginary person—a half-length, seated figure of a bearded patriarch in yarmelke and prayer shawl, who sits, head in hand, in contemplation over his interrupted reading. The scholar is almost a mood, certainly a type rather than an individual, and he personifies the whole heritage of sorrow and tribulation that is associated with Israel. In his formalized drawing Mr. Rosenberg shows, as have other contemporary artists, that the straight line and the planes and angles formed by such lines can be used just as effectively to establish and support a composition as the curved line, long considered the line of beauty.

Samuel Rosenberg has never hesitated to experiment, and *Israel* is typical of a new development in his work, the treatment of subjects universal in appeal and background and with deep spiritual qualities, all done in a semiabstract manner, with color used freely to heighten the emotional quality. His early work had been mostly in portrait, and then came a long period in which local scenes, especially of the picturesque side of neighborhood life in Pittsburgh, were painted with sympathy and affection. His recent work shows greater depth of feeling, philosophy, and an interpretative rather than a representational point of departure in the expression of his ideas.

Samuel Rosenberg was born in Philadelphia in 1896, but came to Pittsburgh when he was eleven years old. He was graduated from the College of Fine Arts of the Carnegie Institute of Technology, and studied also at The National Academy of Design. He is a veteran of World War I. When only seventeen he began to exhibit with the Associated Artists of Pittsburgh. Four years later he won their Second Honor, and since that time he has won practically every important award offered by the Association, including its Carnegie Prize in 1935 and First Prize in 1936. At The Butler Art Institute, Youngstown, Ohio, he won a First and a Second Honorable Mention in 1939 and 1943. The jury of admission for the International accepted paintings by him in 1920 and 1925, and since 1933 he has been an invited exhibitor in the Founder's Day Exhibitions. The Institute presented a one-man show of his work in 1937, and he has had similar exhibitions at Greensburg, Pennsylvania, in 1940 and in New York in 1944. He has been represented in all the large national exhibitions. He is not only a creative artist but has also contributed much to the training of others. He is assistant professor of painting and design at the Carnegie Institute of Technology and has taught at Pennsylvania College for Women, the Young Men and Women's Hebrew

Association of Pittsburgh, and he was the founder and for eleven years the director of the art school at the Irene Kaufmann Settlement. He is represented in the *Encyclopaedia Britannica* Collection, now on exhibition at Carnegie Institute.

The Patrons Art Fund, through which the two pictures were purchased, is devoted exclusively to the acquisition of works of art for the permanent collection of the Carnegie Institute, and new subscriptions or renewals of subscriptions may be made at any time. To date there have been twenty-two pledges of one thousand dollars a year for ten years from the following group: Mrs. Edward H. Bindley*, Paul Block*, George W. Crawford*, B. G. Follansbee*, Mrs. William N. Frew* (in memory of William N. Frew), Mrs. David Lindsay Gillespie* and Miss Mabel Lindsay Gillespie (in memory of David Lindsay Gillespie), Howard Heinz*, Mrs. Mary L. Jackson* (in memory of her brother, John Beard Jackson), Mrs. Samuel R. Kelly (in memory of her daughter, Harriet Roseburgh Kelly), George Lauder*, Albert C. Lehman*, Willis F. McCook*, Andrew W. Mellon*, Richard B. Mellon*, William Larimer Mellon, F. F. Nicola*, Mrs. John L. Porter*, Mrs. Henry R. Rea, William H. Robinson*, Ernest T. Weir, Emil Winter*, and Mrs. Joseph R. Woodwell* and Mrs. James D. Hailman (in memory of Joseph R. Woodwell).

The new acquisitions are now hanging in the permanent collection galleries.

—D. E. G.

A COMPLIMENT

PITTSBURGH's Carnegie Library in its half century has been a place of thoughtful, interested service to the cause of literature in its broadest and deepest sense. This paper owes thanks to the staff at the Library for repeated assistance and courtesy.

—The Pittsburgh Catholic

*Deceased.



THE MUSIC LESSON BY THOMAS H. BENTON

THE PEOPLE'S CHOICE

The *Music Lesson* by Thomas H. Benton is the Popular Prize painting, chosen from "Painting in the United States, 1945" in the nineteenth annual balloting by visitors to the Founder's Day exhibition. The prize canvas, an interior with figures, receives an award of \$200.

The two paintings receiving the next highest number of votes are also rural subjects. The painting second in popularity is *Tall Grass* by John Rogers Cox of Terre Haute, Indiana, who won the Popular Prize last year with his *Grey and Gold* and third prize two years ago with *White Cloud*. His 1945 painting is a landscape of clouds over a clump of trees in the midwestern grasslands on a bright day. The third choice of the public was *Nightfall* by N. C. Wyeth of Chadds Ford, Pennsylvania. It shows a farmer and his daughter at a pasture

fence against a background of farmhouse, barn, and hills, their faces lit by the last twilight glow. The artist was killed recently in an automobile accident after a long career as painter and illustrator.

The next ten paintings in order of number of votes were: *From My Garden* by Audrey Buller; *The River Tay at Perth* by Byron Thomas; *A Boy from Main Street* by Robert Brackman; *Peter Scott* by Luigi Lucioni; *Israel* by Samuel Rosenberg, the only one among the prize-winning pictures to receive an appreciable vote; *Dressing* by John Koch; *Asgaard* by Rockwell Kent; *Dona Nestorita* by Henriette Wyeth, daughter of N. C. Wyeth; *Young Girl* by Eugene Speicher; and *Tidewater* by Clarence H. Carter.

The Music Lesson, painted in 1943, is a homey American scene, a farmer in

straw hat, blue shirt and jeans, and moccasins, strumming his guitar for his barefoot, pigtailed daughter astride a chair, listening and watching intently. The tune in all probability is *Home on the Range*. The braided rug, rocking chair, table with "best" lamp and vase on it mark this the parlor of a typical midwestern farmhouse. In the color scheme the predominating notes are the rose upholstery, the soft green walls, the yellow curtain, the pink dress, and the brown wideboarded floor.

Thomas Benton is especially well known for his paintings, prints, and murals of his native Middle West. Of his art he once wrote: "I believe that you can love the whole world better if you love your own land first. An artist who has nothing to say about what is at his doorstep has, most likely, nothing to say at all." *The Music Lesson* is American through and through and could not be anything else.

Thomas Hart Benton was born in Neosho, Missouri, on April 15, 1889. His career started with a newspaper cartoonist's job in 1905, but later he went to Chicago and then Paris to study. After serving in the Navy in World War I, he settled in New York, where he developed his individual style, taking for his subject matter "the contemporary history of America." In 1935 he returned to Missouri to do a mural for the Capitol in Jefferson City and served several years as the head of the painting department of the Kansas City Art Institute. He still lives in Kansas City. Other murals of his are in the New School for Social Research in New York, the Whitney Museum of American Art, and the University of Indiana. In 1943 he received the Beck Medal at The Pennsylvania Academy of the Fine Arts. He is an author and illustrator. Last year he visited Pittsburgh, in connection with commissions for the Army, Navy, and Maritime Service to depict various phases of their work, to sketch LSTs being made down the Ohio River. He has been exhibiting

in the Founder's Day exhibitions since 1931.

The visitors to the exhibition had their first opportunity to choose a favorite painting in the 1924 International. Malcolm Parcell of Washington, Pennsylvania, was the winner in 1924 and again in 1925. The succeeding winners have been Leopold G. Seyffert in 1926 and 1930, Gari Melchers in 1927, Edmund C. Tarbell in 1928, James Chapin in 1929, Alessandro Pomi in 1931, Daniel Garber in 1933, Frederick J. Waugh in 1934, 1935, 1936, 1937, 1938, Luigi Lucioni in 1939, Cecilia Beaux in 1940, Clarence H. Carter in 1943, and John Rogers Cox in 1944.

D. E. G.

So They Say

Edward Alden Jewell, reviewing the Art Year 1945 in "The New York Times" of December 30: I found ["Painting in the United States, 1945"] a show, all things considered, that veered strikingly away from dull academic routine and formulae; one that seemed provided in gratifying abundance with what, in these columns, we have often designated as sheer painting—thus distinguished from art in which other factors climb to dominance.

4 TREASURE CHEST 1

Her hand-painted silk and mother-of-pearl fan was a luxurious accessory in the coronation day toilette of Marie Antoinette. No doubt the nineteen-year-old queen used it to lighten the more serious details of the court ceremony that spring day in 1774. The fan is on display at Carnegie Museum as part of the DuPuy collection.

The scene painted on the silk shows Louis XVI receiving the crown and sceptre, with Marie Antoinette and court attendants grouped around her. On the reverse is a view of the Trianon with the King and Queen in the foreground. The mother-of-pearl frame is carved in openwork, inlaid with gold, and carries oval portrait medallions. The fastener is jeweled.

WOODLAND PATH

WE LIKE TO READ!



TREE trunks along our woodland path stand silhouetted black against the snow-clad maze of twigs beyond. The lower leaves on the white oak hang brown and lifeless, while the laurel on the rocky hillside is green, as are the stems of the smilax vines and the twigs of the sassafras, the whole winter through.

There are no echoes in the snow-muffled woods. The calls of the winter birds are sharp and clear. The downy woodpecker gives his shrill rattling whistle as he lights on some dead limb, from which comes his exploratory tap, tap, then a pause, as he seems to listen for some sound from a tender morsel within. With a startled "chip," the cardinals slip out from the dense tangle of wild grapevines, the males like a flash of red in the white world around. The nuthatch, the acrobatic tree-trunk cleaner, comes down the tree head first, prying under pieces of bark, peering into crevices, and exploring knot-holes for insects or insect eggs, then off to another tree with a nasal "quank, quank, quank."

The white snow is a page upon which is recorded the nightly doings of the forest dwellers, be it play, tragedy, or commonplace business. Down the path, in long leaps, went the rabbit with spreading hind feet foremost, heading for the old brush pile. Foraging across the path, the skunk left telltale tracks in diagonal fours, while at the old stump the tiny footprints of a deer mouse, front and hind feet paired abreast, show a tail track, too.

With an observing eye and listening ear you will find our woodland path full of interest even when clad in January snow.

—O. E. J.

MORE people choose reading for their spare time than any other hobby, according to a survey made in Pittsburgh and sixteen other cities recently by the National Opinion Research Center of the University of Denver for the American Library Association. Reading is the first choice of 41 per cent of the adults; arts, crafts, or fine arts are mentioned by 16 per cent; sports by 11 per cent; the theater, movies, or concerts by 10 per cent; and listening to the radio or playing records by 9 per cent.

Of those interviewed, 56 per cent report an hour a day or more reading newspapers and magazines, while 22 per cent spend that much time on books.

Women tend to choose books, while men spend more time on newspapers and magazines, according to the survey. After forty the trend is to newspapers and magazines, rather than books. Reading is the choice of 62 per cent of the college-trained.



"A PAUSE IN THE DAY'S OCCUPATION"

A TOAD IN TOWN

BY DOROTHY E. LONG

Assistant in the Section of Herpetology, Carnegie Museum

Of the more than fifty thousand specimens in the Section of Herpetology, our large and rotund American toad, *Bufo americanus*, is almost unique, for she is not embalmed in alcohol, but alive, vivacious, and voracious. The toad's bright eyes, evident sagacity, and dignified roundity led us to bestow upon it the name Winston. Later we noted evidences of toad femininity—a comparatively light throat and delicate thumbs, without callouses—and changed the name to Winstonia, diminutive Winnie.

Our association began last August in Potter County, Pennsylvania, in the garden of Mr. and Mrs. Paul Wible, who have previously shown interest in the Carnegie Museum collections by contributing specimens, and who—perhaps reluctantly—consented to my transferring Winnie from their garden to the Museum. Such covetousness was forgivable, I trust, for with the toad in Pittsburgh I hoped to learn the full extent of its gluttony.

At first Winnie was confined to a small snake box, with a damp cloth for a bed and a saucer of water for a pool. After a few days we blocked off the dark corners of the laboratory, crowded with jars of specimens, and gave Winnie her freedom, *carte blanche*, save for the weekends and many nights which she spent in my Victory garden and in my bathtub.

In the Victory garden Winnie was most contented. Not until almost dusk did she stir from the shelter of the

plants, but then, awakening as though by an alarm clock, she would watch cautiously for every little movement, and, with a lightning-fast extension and retraction of the tongue, snatch a bean beetle here or, with perhaps one foot braced on a cabbage leaf, reach eight inches or so for a cabbage worm there. Winnie, like all toads and frogs, recognizes only moving objects as food, so no dead and harmless bean beetle is her meat—unless, perchance, she picks it up when it is agitated. Too often, however, the approach of darkness terminated my gardening when Winnie had just begun to eat. So, until the cool autumn days killed the creatures or drove them underground, many of us, including nine-year-old Anthony Graham Netting, carted insects, worms, spiders, salamanders, or any small living animal we could find, to Winnie for thirty-five consecutive breakfasts. The diet we provided was sufficiently varied, but on only three occasions did we have more food than the toad wanted. Once she was stymied after eating 24 grasshoppers, 12 cabbage worms, 5 Mexican bean beetles, 4 bean beetle larvae, 3 Japanese beetles, 4 soldier beetles, 3 striped cucumber beetles, 1 spotted cucumber beetle, 2 ground-beetles, 1 cutworm moth, 1 squash bug, 1 "gold-bug," and 1 small cricket; another day she was satiated after having eaten 31 grasshoppers; and on another occasion she ate 152 Mexican bean beetles within an hour, and then struck at, but did not take, an enormous grasshopper.

Cicadas, spiders, walking-sticks, numerous other arthropods, and millipedes were included in Winnie's diet. In fact, she ate, or tried to eat, every living creature we showed her, except one tomato worm. This she looked at

twice and then turned quickly away from, closing her eyes tightly, arching up her back, and drawing her chin tight against her front feet. On another occasion, however, she ate a tomato worm with apparent delight, although she had to struggle to pull it from the tomato branch. Smaller creatures were eaten with ease and hardly perceptible movement; larger creatures were sometimes swallowed with difficulty and much contortion of the body muscles.

One day we served Winnie a wiggling, four and one-half inch, dusky salamander. As it slithered off toward a dark corner, she pursued it with long deliberate strides, trying to head it off without being attacked and yet place herself in a strategic position for the kill. After a heated chase Winnie saw her chance, grabbed the salamander by the head with her long ensnaring tongue, and swallowed it down with a few strenuous gulps and the aid of both front feet. When we showed her an eight and one-half inch newly born water snake, she reacted somewhat similarly but made the mistake of grasping the creature about midway. It bit her, without breaking the skin, and she dropped it but grasped it again, only to be bitten the second time. Two reprisals were enough to discourage even Winnie. She sunk her head between her front feet, filled her lungs with air to round out her sides, and "made like" a stone—a protective attitude assumed by many toads.

Occasionally she even ate a dead insect or bits of vegetative matter which were moved mechanically. We have used forceps to dangle a dead earthworm before her and agitated a dead

insect by jiggling a long strip of cardboard which was slipped under the paper on which the insect lay. Once a cherry tomato was capriciously rolled across the floor. Winnie thrust out her tongue and grabbed; with a couple of gulps and blinks of her eyes the tomato was swallowed. It would, we supposed, be digested, for some vegetative matter—about two per cent of the diet,

according to one investigation—is taken in accidentally with the moving food, and toads do have pancreatic, gastric, and most of the other digestive juices.

Winnie's most publicized triumph, however, was the eating of a large black widow spider—the kind that can kill a man. The encounter was staged in the Sec-

tion of Entomology, which supplied the black widow, and the contestants were not coached, although I heard rumors that the black widow was carefully fattened before the meet. We of the Section of Herpetology were betting on Winnie, and she won in a gulp. The victory, though, proved only that the toad was able to digest the venom of the spider without suffering any ill effects, for we were unable to determine whether or not the spider bit the toad as it was swallowed.

As *Winstonia* appears to be indiscriminating in her choice of food when several kinds are offered her, it seems probable that the relative percentage of various species of animals she would consume in a natural habitat would correspond to the abundance of each animal living on or near the ground in the area. Investigators have shown, however, through stomach examinations, that grasshoppers, in spite of



their abundance in most places, form a small portion of a toad's diet, but this may be due to some factor other than preference. Further, since our toad has shown that she can eat 152 pestiferous insects of the size of a Mexican bean beetle in one day, we can surmise that a toad—at least one of Winnie's size, seven and one-half ounces—could eat 4,560 equally sized pestiferous insects in one month, or 22,700 from May through September. We have no experimental evidence to show that 152 bean beetles could be consumed on each of consecutive days—our supply was not great enough—and so the last two figures may be in excess; but since the digestive processes of toads are rather rapid, and since there is some evidence that the stomach is emptied once a day, it seems probable that a toad's capacity for food would be renewed from day to day.

If such pests as Japanese beetles, cucumber beetles, cutworms, corn borers, and cabbage worms disappear by the thousands in the wake of hungry toads, it would seem worthwhile to import toads to our city gardens, from which they have virtually disappeared. Probably the lack of suitable breeding places has been largely responsible for this disappearance, but also many urban toads have met their death in traffic accidents.

To keep toads in our gardens and off the streets, to which they are attracted by insects which collect near the lights, may require some ingenuity. A pool of water for breeding in the spring, water or a damp retreat throughout the summer, a dark or semidark daytime refuge, and, of course, a place for a burrow in the wintertime are requisites in a toad's life. If all these things are accessible within even a small area, the toad is unlikely to migrate from the area; this was evidenced in Winnie's orienting herself in the laboratory and staying within a few feet of her

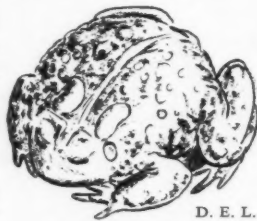
pan of water and small cardboard house, unless our slothfulness forced her to venture forth in search of food. In these searches, incidentally, she has almost rid our laboratory of a plague of spiders.

There are various ways of building shelters to encourage toads to stay at home. They like a cool, damp cavity with the opening facing away from the sun and small enough that they "rub shoulders" with the walls. One can build, with four stones or bricks, a three-sided house with a roof and cover the structure with earth, leaving an opening for a door. Lilliyan Stewart, of Waycross, Georgia, who has campaigned arduously for the protection of toads, builds homes of earthen pots for the toads in her locality. She buries the top of a pot an inch or so below the surface of the soil and digs a small tunnel through the earth to the inside—and the toads like it.

Toads, if given a chance in our gardens, would not only eat our pests but would make interesting pets, for they are clean, docile, and amusing. Any skeptic who has an antipathy toward toads might come to the laboratory to get acquainted with Winnie. I can almost guarantee conversion, for already some of the most squeamish persons I know, who at first exclaimed, "Don't bring that toad near me," are now petting Winnie and actually bragging about it. The fact that toads do not cause warts on those who handle them need scarcely be mentioned here, although they do have wart-shaped glands for protection against some of their enemies. Then, too, the male American toad has a melodious call.

We would enjoy listening to a chorus of toads on a spring evening—in contrast to the ear-splitting Spring Peeper.

As we garden in Peace again we may need not only one toad in town, but one or more for each of our garden plots.



D. E. L.



THE GARDEN OF GOLD



SNOWSTORMS blanket the Garden of Gold, but gifts continue to blossom brightly, nourished by the warm, fertile soil of Carnegie Tech friendships.

November gifts for the 1946 Endowment Fund of Carnegie Institute of Technology include \$5,552.28 from the estate of Mrs. Augusta F. Porter, designated for the Building Fund. Under Mrs. Porter's will, the income from \$5,000 was to be paid the family gardener during his lifetime. Following his death last July, the bequest is turned over to Carnegie Tech.

A large group of Philadelphia firms in the printing field contributed during the month to the Department of Printing Research Fund. These include \$500 from the National Publishing Company and \$500 from Edward Stern and Company; also \$300 from Franklin Printing Company, \$250 from Philadelphia Bindery, Inc., \$200 from the George H. Buchanan Company through A. H. Kinsley, \$200 from The Beck Engraving Company, and \$100 each from Walter T. Armstrong, Inc., W. Franklin Hodges and Son, Inc., and John T. Palmer Company.

For the Department of Printing Scholarship Fund, Haynes Lithograph Company of Silver Spring, Maryland, sent \$250.

A contribution of \$770 for the Chemistry Department Research Fund was given anonymously.

The Chicago Clan, of which Frederick Faville, E'19, is president, sent \$217 for the Alumni Fund for Greater Interest in Government.

For the Class of 1917 Engineering Scholarship Fund, Thomas E. Orr, E'17, sent \$250.

The Faculty Memorial Scholarship Fund was recipient of \$100 from Camille Grapin, professor of architectural design in the College of Fine Arts.

Two gifts of \$100 each for the General Endowment Fund were received from Olen E. Bee, E'20, and from Alvin J. Rosengarth, E'20.

Gifts of less than \$100 for various established funds came from numerous alumni and friends of Tech, amounting to \$2,329.18 during November. All contributions received during the month amount to \$12,518.46.

The total of gifts received for the 1946 Endowment Fund stood at \$3,303,044.92 as of November 30, with an additional \$48,500 pledged. The goal, as readers of the Garden of Gold are well aware, is to raise for endowment \$4,000,000 by June 30, 1946. The Carnegie Corporation of New York is pledged to double this sum by adding \$8,000,000 for a total new endowment of \$12,000,000.

You may note that the figures given above are as of November 30. During the year many fields have been cultivated and seed sown which it is always hoped will produce a harvest as the year draws to a close. It is known that a number of large contributions to this Endowment Fund are under consideration and as we write these words there is every hope that the Christmas season will be productive of substantial additions to the amounts already given or pledged. For these reasons it seems wiser to wait and announce at a later date what actually transpires before January 1.

The year 1945 has seen many gifts, both large and small, from so many widely scattered sources that it is with a feeling of deep gratitude and appreciation that all friends of Carnegie Tech see the possibility of the goal's being reached at not too distant a date and well in advance of June 30, 1946, when the time limit set in the offer of the Carnegie Corporation of New York expires.



"THE PLAY'S THE THING"

*A Review of the Department of Drama's
Presentation of Euripides' "The Trojan Women"*



BY AUSTIN WRIGHT

Associate Professor of English, Carnegie Institute of Technology



FOR the second play of the season in the Little Theater the Department of Drama elected to produce *The Trojan Women*, by Euripides, using the lovely translation of Gilbert Murray. The stage history

of the Little Theater reveals that Greek drama has been put on the boards there intermittently since the theater's beginning and that for a number of years it was the custom to produce annually one of the great classic tragedies. Of late, however, this practice has been abandoned, and I believe that *The Trojan Women* is the first play of the sort to be seen by Tech audiences since the production of *Hippolytus*, also by Euripides, nearly ten years ago.

The magnificent achievements of Greek civilization centuries before the Christian era have been the admiration and the despair of succeeding generations of artists, and nowhere do the intelligence and the imaginative and poetic gifts of the Greeks appear more clearly than in the works of the tragic dramatists. It is testimony to the maturity and esthetic sensitiveness of the ancient audience that the long speeches of these undramatic tragedies, declaimed by masked actors in a vast outdoor amphitheater, not only held attention but represented one of the most popular as well as most highly respected forms of entertainment in the ancient world. It is well for all of us to have

the opportunity to realize afresh from time to time the artistic heights to which could rise a small nation of seafaring people clinging to the shores of a tiny area of the Mediterranean nearly twenty-five hundred years ago. It is even more appropriate for the Department of Drama to enable its students to acquire from actual production a practical knowledge of one of the world's supreme art forms which they have studied in the classroom. Nevertheless, most modern playgoers will probably agree with me that, though once in ten years is too seldom to see a Greek tragedy, once every year would be too often! Such are the limitations of the modern mind, seduced by the fleshpot offerings of the contemporary stage and screen and radio into a yearning for spectacle and love-making and trivialities and on-stage violence.

The plays of Euripides have been staged more often at Tech than those of Aeschylus and Sophocles, and *The Trojan Women* has been a special favorite. It had been produced on at least two earlier occasions, in 1924 under the direction of Thomas Wood Stevens and in 1929 under that of E. Martin Browne. The present production was directed by Mary Morris and its unequivocal success is a tribute to her energy and perseverance as well as to her stagecraft. The obstacles to be overcome in staging a Greek tragedy with modern players before a modern audience are tremendous, the problems posed by the chorus alone being sufficient to make an insomniac out of any director. Yet the production won far more than a succès d'estime, and glowed with a living fire which again and again really touched

the hearts of those in attendance.

The Trojan Women depicts the anguish of the wives and daughters of Troy after the fall of the city and the slaughter of the Trojan warriors by the victorious Greeks, about to embark upon their own bitter homecoming. Though the opening speech of Poseidon and his dialogue with Pallas outline the situation and foreshadow the future, players unfamiliar with the Homeric legends miss innumerable allusions and undertones which were of course patent to a Greek audience; nevertheless the central theme of the suffering inflicted by war and the retribution visited upon victor and victim alike is presented with clarity and force. The women of Troy are the prey of the conqueror, and as they await their destiny they bewail the destruction of their city and the slaughter of their men and shrink from the wretched life which faces them as slaves of the hated Greeks.

In a sense the play is a bitter piece of propaganda. Euripides wrote it at a time when Athens had just won a war of aggression against Melos and, following the customary cruel procedure of the victor which contrasts so strangely with the intellectual enlightenment of the Greeks, had put the men of Melos to the sword and enslaved the women and children. No doubt Athens nursed an uneasy feeling of guilt, and it is conjectured that

Euripides strove to appeal to this feeling and perhaps to forestall an expedition against Sicily which was then under preparation—and which was to turn out disastrously. However that may be, *The Trojan Women* is one of the strongest commentaries ever made upon the agony and folly of war.

To an audience of 1945 the drama suggests impressive parallels with the present. Today, as after the fall of Troy, "weary soldiers roam, waiting the wind that blows at last for home"; a ruined Europe magnifies many times the destruction visited upon Troy; thinkers of the Vansittart school advocate for Germany the same peace of annihilation which the Greeks inflicted upon their beaten enemy and which Rome was later to employ with devastating success against Carthage; in the accusations against Helen one perceives a startling similarity to the current trials of war criminals; and the slaughter of our youth, the wasting of our natural resources, and the vast difficulties born of the world conflict make us realize sadly that in war even the victors lose.

In *The Trojan Women* there is less choral speaking than in some other Greek tragedies, many of the lyric passages being assigned by Euripides himself to individual speakers. Miss Morris carried this process further and broke up most of the choral lyrics into short individual speeches. But though



STUDENT ACTORS IN A SCENE FROM "THE TROJAN WOMEN"

this decision to keep choral recitation to a minimum was wise and indeed almost inevitable, I thought that the brief passages which were spoken in unison were highly impressive. Also effective was the choral movement directed by Gertrude Bunzel. On the other hand, the necessity of simulating protracted misery and a sympathetic interest in the tragic proceedings imposed upon the members of the chorus a difficult task; it is impossible for a group of young women to wear a consistently pained expression for thirty minutes straight without losing something of the dignity essential to the performance. The grotesque masks worn on the ancient stage no doubt eliminated this difficulty.

Through the decision to create seven speaking roles for members of the chorus in addition to the leader, the number of speaking parts in *The Trojan Women* was increased to sixteen; and since all but one of these were double-cast, it is obviously impossible to comment upon individual performances. In general, however, it may be said that the diction was admirably clear—strictly a necessity in the performance of such a play—and that the actors and actresses who carried the major roles acquitted themselves ably. The part of Hecuba, who is on stage throughout the entire performance, is very long and arduous, and both actresses who played it deserve praise. Cassandra possessed in both casts a wild beauty and represented the prophetic frenzy of the Trojan princess in a striking manner that made the eerie scene in which she appears one of the highlights of the evening. The difficult scene in which Andromache bids farewell to her doomed child was treated very effectively in this production, partly through the help of a tiny youngster who suggested movingly the helpless pathos of the little boy's situation. The scene in which Hecuba wraps the dead child in funeral garments "charmed tears into the eyes," and both Helens were as successful as could be expected in suggesting the

superhuman beauty that "launched a thousand ships and burnt the topless towers of Ilium." How difficult it is to reflect upon this ancient tale without having the lovely phrases in which poets of all ages have clothed it flash again and again across the mind.

Talthybius, the herald, was forceful and manly. I enjoyed the lovely opening speech of Poseidon, though it was spoken too rapidly in view of its importance as dramatic exposition. The thankless role of Menelaus, that uxorious and vacillating chieftain, was properly made unimpressive, but I deplored the use of an Uncle Josh beard, which made him almost a comic character.

The lights and shadows which for the most part took the place of scenery were skilfully handled, and I thought that the trumpet calls with which the production closed were most impressive. The costuming was brilliant throughout.

Greek tragedy is essentially lyric rather than dramatic. Chiefly what one bears with him from any first-rate production is the haunting recollection of poetic passages which shadow forth now the beauty and now the tragedy of human life. In this respect Greek drama stands second only to Shakespeare among the literature of the world. One remembers with pleasure even such simple descriptive phrases as "the dip of the oar, the black hull on the sea," or "Forth to the long Greek ships and the sea's foaming"; or among longer passages, Hecuba's outcry against man's fate as she kneels above the body of the child Astyanax:

... O vain is man,
Who glorieth in his joy and hath no fears:
While to and fro the chances of the years
Dance like an idiot in the wind!

Or the bitterly true, tragic words of Poseidon, which resound like the voice of doom across the far reaches of our own war-ridden world:

... How are ye blind,
Ye treaders down of cities, ye that cast
Temples to desolation, and lay waste
Tombs, the untroubled sanctuaries where lie
The ancient dead; yourselves so soon to die!

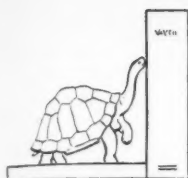
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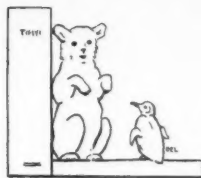
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THE SCIENTIST'S BOOKSHELF

By M. GRAHAM NETTING

Curator of Herpetology, Carnegie Museum



THE DINOSAUR BOOK: THE RULING REPTILES AND THEIR RELATIVES By EDWIN H. COLBERT. American Museum of Natural History, Man and Nature Publications, Handbook no. 14. New York. 1945. 156 pp., illustrated. \$2.50. Carnegie Library call no. 568.19 C67.



scrapers appeared in a New York newspaper. The cartoon was sent to Director W. J. Holland by Andrew Carnegie, who noted on the margin: "Dear Chancellor, buy this for Pittsburgh. A.C." This instruction was not carried out, for it developed that the find which inspired the cartoon was on land owned by the University of Wyoming, and the price asked for this incomplete skeleton was nothing less than a Carnegie Library for the campus. A richer quarry was soon discovered elsewhere in Wyoming, the gargantuan labors of excavating, shipping, and assembling were carried out, and the skeleton was placed on view in the enlarged Carnegie Institute in 1907. Mr. Carnegie took so much pride in this large namesake, for it was christened *Diplodocus carnegiei*, that he donated exact replicas of it to many of the leading museums of the world, thus making it "one of the most famous fossil skeletons of all time."

I was not born with a dinosaur bone in my mouth, but, en route to my laboratory, I have passed *Diplodocus* and its stouter relative, *Apatosaurus*, nearly every morning for twenty years. It was

with real pleasure, therefore, that I recently found in my mail a book by the American Museum's talented Curator of Fossil Reptiles, Amphibians, and Fishes, Edwin H. Colbert.

The Dinosaur Book is a much needed contribution to popular natural history, for dinosaurs have aroused more public interest than any other extinct creatures. The opening pages of Dr. Colbert's book are evidence of this, for he reproduces seven dinosaur cartoons, culled from the multitude that have appeared since the Peeping Tom which attracted Mr. Carnegie's eye.

The dinosaurs were the ruling reptiles during the Mesozoic Era of geological history. For one hundred and forty million years they evolved into divergent types, which fought or snoozed, stuffed their great bellies with succulent plants or feasted hugely on many-ton carcasses of their relatives. Some were as small as a chicken; others, measuring almost a hundred feet in length, were the largest land animals ever known. Some walked with ponderous tread, others raced for safety, ostrichlike, on two legs. Their story is one worthy of telling, for, as Colbert says: "It is a story on so vast a scale as to dwarf our own history almost to insignificance."

Dr. Colbert does not project his readers suddenly into dinosaurian days. He first discusses the pioneers in paleontology: Cuvier, Owen, Leidy, the great feudists Cope and Marsh, and others. This chapter ends with a listing of the sixteen North American museums which have displays of fossil amphibians and reptiles. The author as-

serts that the listing is from east to west, rather than in order of importance, yet oddly enough the American Museum leads all the others. Even one willing to admit the pre-eminence of this institution's fossil reptile collection, as I am, can scarcely agree that New York is east of Cambridge, Amherst, and New Haven!

The succeeding chapter, one of the most interesting in the book for the general reader, describes the methods of hunting, excavating, shipping, cleaning, mounting, and studying fossils. Museum men will applaud Colbert's forthright statement of one of their tenets: "The reputation of a scientist and of the institution for which he works depends largely upon his publications. Without a solid foundation of scientific publications emanating from its activities, a museum is not a museum but merely a warehouse or a showplace."

The main portion of the text treats the predecessors of the dinosaurs, the two great groups of dinosaurs—those with lizard hips and those with bird hips—in all their evolutionary variety, and finally, the relatives and contemporaries of the dinosaurs. Some of these chapters are weighty with scientific names, a matter of necessity since these creatures have no others! Readers who have already incorporated into their vocabularies the technical names of many plants—chrysanthemum, for example—will appreciate the fact that *Styracosaurus* is more convenient than the lengthy circumlocution "horned dinosaur with spikes around the frill." Colbert facilitates the learning of these names by including phonetic equivalents in the text.

Readers who find a few chapters difficult can get their money's worth from the numerous photographs, illustrated charts and diagrams, and portraits which enliven the book. These are the work of numerous photographers and at least four different artists. Most of the illustrations are excellent; a few, frankly, are unworthy of inclusion.

The brief chapter sixteen, "Why Study Fossils?" is one of the best recent explanations of the importance of museum science. These pages cannot be summarized adequately with plucked excerpts, but one sentence merits quotation: "To put it more simply, we are great because we understand our world, and we understand our world because we are curious about it."

During the last century paleontologists have learned more of ancient animals than had been discovered in all previous centuries. Colbert maps sixty-five world localities where important finds of amphibians and reptiles that lived more than sixty million years ago have been made! Much remains to be learned, and many ideas current today may have to be revised in the light of further discoveries. There are some interpretations of existing material, however, which even a non-paleontologist like the reviewer cannot accept without argumentation. When I look at the legs of our giant herbivorous dinosaurs I cannot see the postlike limbs which Colbert describes, and every time I peek into the mouth of certain duck-bills I am forcibly reminded of the teeth of modern mollusk-eaters, although the author assures us that these dinosaurs ate plants.

My ever replenished stack of unanswered letters is weighted with a waxy-surfaced, tan pebble. The finish was acquired over one hundred and twenty million years ago when the pebble, deep in the stomach of a mighty dinosaur, aided in the maceration of plants bolted without "Fletcherizing." The dinosaurs were stupid, but they never fought wars and they persisted for more than a hundred times as long as man has existed. In a million years man has accomplished more than any group of prehistoric animals, but my ancient gastrolith leads me to wonder if some museum, fifty million years hence, will pride itself upon its collection of human fossils, excavated from the atomized remains of the cities of today.

THE EDITOR'S DESK

Heartiest congratulations to Gladys Schmitt, Mrs. Simon Goldfield in private life, an assistant professor of English at Carnegie Tech, for the \$50,000 recognition given her novel *David the King* as the March selection of the Literary Guild. Her book has also been chosen the book of the year by the Religious Book Club. *David the King* is the result of five years of intensive work, the first year largely research at the Carnegie Library reference room. In 1942 Miss Schmitt's *The Gates of Aulis* won the \$1,000 Dial Press award and she has published many short stories. She was graduated from the University of Pittsburgh in 1932.

♦♦♦

The exhibition "Painting in the United States, 1945" was the most successful current American show in the history of the Carnegie Institute. The press reviews were all favorable, and this in a year when most of the American shows were handled very critically. More than fifty-eight thousand persons saw the exhibition. One hundred and forty groups had special guidance through it. A total of 4,491 catalogues were sold. Twenty-one paintings were purchased from the exhibition, ten of which went into Pittsburgh collections.

♦♦♦

Human Nature in the Making by Max Schoen, head of the Department of Psychology and Education at Carnegie Tech, just published by D. Van Nostrand, New York, is described by a colleague as follows:

This volume represents one of the most successful recent attempts at humanizing the presentation of the elementary biological and psychological data available to the student of human personality. Professor Schoen writes within the framework of a social philosophy that attaches considerable significance to the development of a personality which represents in the highest degree man's potentialities for becoming "human."

♦♦♦

Four panels of Christmas scenes, painted by the Palettes under Katherine McFarland and Dorothea Alston in the Saturday classes at Carnegie Institute last year, were sent to Deshon General Hospital for Yuletide decorating last month.

This December the students working together, practically elbow-over-elbow, have completed several other panels which will be sent to a hospital or other institution for Christmas 1946.

♦♦♦

From Wilmarth Sheldon Lewis, editor of the Yale Edition of Horace Walpole's Correspondence, to Austin Wright, after his review in *CARNEGIE MAGAZINE*: "Thank you again for your very generous article on this edition. It is one of the most carefully written that has appeared and it is a great relief to have the facts right!"

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